| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
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| 10/786,454 | 02/26/2004 | Sarvar Patel | 29250-002013/US | 4912 |

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| EXAMINER |
|---|
| TOLENTINO, RODERICK |

| ART UNIT | PAPER NUMBER |
|---|---|
| 2134 | |

| MAIL DATE | DELIVERY MODE |
|---|---|
| 03/03/2008 | PAPER |

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

| | Application No. | Applicant(s) |
|---|---|---|
| **Office Action Summary** | 10/786,454 | PATEL ET AL. |
| | **Examiner** | **Art Unit** | |
| | Roderick Tolentino | 2134 | |

*-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --*

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE _3_ MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
  Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

1)☒ Responsive to communication(s) filed on _30 November 2007_.

2a)☒ This action is **FINAL**.          2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

4)☒ Claim(s) _1-24_ is/are pending in the application.

    4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) _1-24_ is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

**Application Papers**

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on _26 February 2004_ is/are: a)☒ accepted or b)☐ objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a)☐ All b)☐ Some * c)☐ None of:

      1.☐ Certified copies of the priority documents have been received.

      2.☐ Certified copies of the priority documents have been received in Application No. _____.

      3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

    * See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

1)☒ Notice of References Cited (PTO-892)

2)☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3)☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.

4)☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____

5)☐ Notice of Informal Patent Application

6)☐ Other: _____.

## DETAILED ACTION

1.      Claims 1 – 24 are pending.

### Response to Arguments

2.      Applicant's arguments with respect to claims 1 and 24 and their amended matter, have been considered but are moot in view of the new ground(s) of rejection, as necessitated by amendment made by applicant on 11/30/2007.

3.      Applicant's arguments with respect to claims 1 and 24 and the limitation of "a value of a second cryptosync," are not persuasive.

4.      Applicant argues that Rezaiifar fails to teach "a value of a second cryptosync," in claims 1 and 24.  Applicant respectfully disagrees.  Rezaiifar teaches deriving a value of a first cryptosync for the communication session based on a value of a second cryptosync (Rezaiifar, Col. 2 Lines 25 – 38, creates two cryptosync values and Col. 2 Lines 39 – 49).  Rezaiifar discusses that a cryptosync exists on the transmission end and the receiving end, thus there would be 2 cryptosync values.  They are derived from each other since they both need to be synchronized together.

### Claim Rejections - 35 USC § 103

5.      The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically teachd or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

6.      Claims 1 – 24 are rejected under 35 U.S.C. 103(a) as being unpatentable over

Rezaiifar et al. U.S. Patent No. (6,980,658) in view of Boneh et al. U.S. Patent No.

(6,134,660).

7.      As per claims 1 and 24, Rezaiifar teaches deriving a value of a first cryptosync

for the communication session based on a value of a second cryptosync (Rezaiifar, Col.

2 Lines 25 – 38, creates two cryptosync values), the second cryptosync having a longer

life than the first cryptosync (Rezaiifar, Col. 4 Lines 46 – 62, cryptosyncs are time

values and its value will vary depending on transmitted data, therefore one value will

last longer than another) but fails to teach value having a life limited to the

communication session and values having extending over multiple communication

session.  However, in an analogous art teach value having a life limited to the

communication session and values having extending over multiple communication

session (Boneh, Col. 3 Lines 29 - 45, various expiration times for encryption keys)

        At the time the invention was made, it would have been obvious to a person of

ordinary skill in the art, to use Boneh's method for revoking computer backup files using

cryptographic techniques with Rezaiifar's method and apparatus for encrypting

transmissions in a communication system because it offers the advantage of preventing

the loss of data (Boneh's Col. 1 Lines 12 – 20).

8.      As per claim 2, Rezaiifar teaches the second cryptosync is used for message

encryption by at least one of the two devices (Rezaiifar, Col. 3 Lines 36 – 45, mobile

devices and base stations).

9.      As per claim 3, Rezaiifar teaches the second cryptosync is used for verifying message integrity by at least one of the two devices (Rezaiifar, Col. 2 Lines 39 – 48, verification).

10.     As per claim 4, Rezaiifar teaches the second cryptosync is used for verifying message integrity by at least one of the two devices (Rezaiifar, Col. 2 Lines 39 – 48, verification).

11.     As per claim 5, Rezaiifar teaches the second cryptosync changes between communication sessions (Rezaiifar, Col. 6 Lines 41 – 44, different cryptosyncs).

12.     As per claim 6, Rezaiifar teaches deriving step derives the first cryptosync as at least a portion of the second cryptosync (Rezaiifar, Col. 2 Lines 25 – 38, creates two cryptosync values).

13.     As per claim 7, Rezaiifar teaches the deriving step derives the first cryptosync as at least a portion of the second cryptosync and a fixed bit sequence (Rezaiifar, Col. 4 Lines 46 – 62, bit sequence).

14.     As per claim 8, Rezaiifar teaches the deriving step derives most significant bits of the first cryptosync as the portion of the second cryptosync and derives least significant bits of the first cryptosync as the fixed bit sequence (Rezaiifar, Col. 4 Lines 46 – 62, bit sequence).

15.     As per claim 9, Rezaiifar teaches the fixed bit sequence is a string of 0s (Rezaiifar, Col. 9 Lines 11 – 22, EID value of Zero).

16.     As per claim 10, Rezaiifar teaches the deriving step derives a 32 most significant bits of the first cryptosync as the second cryptosync and derives a 32 least significant

bits of the first cryptosync as a string of 0s (Rezaiifar, Col. 9 Lines 11 – 22, EID value of Zero).

17.     As per claim 11 Rezaiifar teaches the deriving step derives a portion of the first cryptosync as the second cryptosync (Rezaiifar, Col. 2 Lines 25 – 38, creates two cryptosync values).

18.     As per claim 12, Rezaiifar teaches the deriving step derives a first portion of the first cryptosync as the second cryptosync and derives a second portion of the first cryptosync as a fixed bit sequence (Rezaiifar, Col. 4 Lines 46 – 62, bit sequence).

19.     As per claim 13, Rezaiifar teaches the fixed bit sequence is a string of 0s (Rezaiifar, Col. 9 Lines 11 – 22, EID value of Zero).

20.     As per claim 14, Rezaiifar teaches the deriving step comprises: performing a pseudo-random function on the second cryptosync; and generating the first cryptosync from output of the pseudo-random function (Rezaiifar, Col. 8 Lines 15 – 21, randomly chosen).

21.     As per claim 15, Rezaiifar teaches the generating step generates the first cryptosync as the output of the pseudo-random function (Rezaiifar, Col. 8 Lines 15 – 21, randomly chosen).

22.     As per claim 16, Rezaiifar teaches the deriving step is performed at a base station (Rezaiifar, Col. 3 Lines 36 – 45, mobile devices and base stations).

23.     As per claim 17, Rezaiifar teaches the deriving step is performed at a mobile station (Rezaiifar, Col. 3 Lines 36 – 45, mobile devices and base stations).

24.     As per claim 18, Rezaiifar teaches encrypting a frame of information to send from the at least one of the two devices using the first cryptosync (Rezaiifar, Col. 2 Lines 19 – 23, encryption).

25.     As per claim 19, Rezaiifar teaches the frame of information is a radio link protocol, RLP, frame (Rezaiifar, Col. 6 Lines 45 – 56, RLP frames).

26.     As per claim 20, Rezaiifar teaches incrementing the first cryptosync after the encrypting step (Rezaiifar, Col. 2 Lines 38 - 48, incrementing).

27.     As per claim 21, Rezaiifar teaches decrypting a frame of information received at the at least one of the two devices using the first cryptosync (Rezaiifar, Col. 5 Lines 56 – 67, decryption).

28.     As per claim 22, Rezaiifar teaches the frame of information is a radio link protocol, RLP, frame (Rezaiifar, Col. 6 Lines 45 – 56, RLP frames).

29.     As per claim 23, Rezaiifar teaches incrementing the first cryptosync after the decrypting step (Rezaiifar, Col. 2 Lines 38 – 48, incrementing).


### *Conclusion*

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within

TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Roderick Tolentino whose telephone number is (571) 272-2661. The examiner can normally be reached on Monday - Friday 9am to 5pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kambiz Zand can be reached on (571) 272-3811. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Roderick  Tolentino

Examiner
Art Unit 2134

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